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FOREIGN AGRICULTURAL EXTENSION ACTIVITIES

Africa, Australia, British Guiana, Canada, Ceylon, Cyprus, Egypt,
England, Germany, India, Ireland, Malay States, Scotland

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DISTRIBUTION: A copy of this circular has been sent to each State extension director; State and assistant State leader in county agricultural, home demonstration, and 4-H club work; and to each agricultural-college library, and experiment-station library.

A F R I C A

Training Farmers for the Irrigation Settlements

The so-called Trainee-Settler course was commenced early in 1934 at the schools of agriculture with the object of providing a 2-year preliminary training in practical agriculture which would give students a thorough grounding in systems of intensive farming and thereby put them in a better position to cope successfully with the problems of such an exacting system as irrigation farming.

Since it was realized that there are large numbers of young men who financially would not be in a position to meet the cost of the ordinary courses offered at the schools of agriculture, and since many of these young

Cost of Course

fellows would, if given the opportunity, make excellent farmers, it was ruled that the inclusive fee for the course would be 36 pounds (about \$175.20) per annum, but that where prospective students

could produce satisfactory evidence to show that they were not in a position to pay the full fee, this would be reduced in accordance with the capacity of the student to pay. In order further to enable needy young men to take advantage of the course, the student is supplied with a simple outfit of clothing, and in addition receives an amount of 30 shillings (about \$7.30) per month, 20 shillings (\$4.87) of which is put to his credit in the Post Office Savings Bank. The amount so credited is later paid to the student when, on the completion of his training, a plot of his own is finally allocated to him.

At the schools no differentiation is made between the trainees and students attending other courses, and every effort is made to encourage the young men, and to imbue in them a spirit of independence.

While these students are responsible to a large extent for the majority of the practical farm operations, as far as possible the different phases of farm work are carried out under the direction of competent instructors, in

Practical Work

order that the students may learn while they work. Special emphasis is placed on practical work that will be of use in irrigation schemes such as dairying and the management of dairy cattle. Poultry,

horticulture, and other intensive branches of farming are stressed. Particular attention is paid to the preparation of lands and cultivation of crops under irrigation, while the utilization of crops grown under irrigation forms an important part of the training.

To acquaint these students with some of the simple fundamental facts in regard to agriculture, a series of lectures is delivered on the branches of the industry that will play an important part in irrigation; and with a view to encouraging a healthy spirit of competition and sportsmanship among the trainees, all sporting activities of the school are open to them.

Further Period of Training

After the satisfactory completion of the 2-year course, the student is required to undergo a further period of training as a probationer on an irrigation settlement. Here two students are allotted a plot, the size of which is equal to the average under the particular scheme.

These students receive an advance sufficient to enable them to acquire the necessary working animals and implements, and, in addition, a loan of a few shillings per day from which to make provision for board and lodging. A house is allocated to four students, and this serves as a home during the 2 years of probation.

A certain amount, similar to that allowed at the schools, is put to the trainee's credit, and this is paid out when he receives his permanent holding.

All advances are debited against the student's account, and the proceeds of the sale of crops and stock, the disposal of which is effected by the department acting on the trainee's behalf, are put to his credit.

What Trainees Have Already Accomplished

While a system of continuous crop production such as obtains at a number of the irrigation schemes cannot be regarded as satisfactory, yet it is interesting to note that in 2 years some of the present trainees on one of the probationary settlement schemes have been able to pay off all amounts debited against their plots except amounts for land, and this in spite of the fact that the main cash crop has been wheat.

The present trainees at the settlement under reference, namely Losperfontein, are married men who have been drafted from applicants mainly from the forestry settlements, and they have not had the advantage of previous training at a school of agriculture. In spite of this handicap it is encouraging to be able to relate that 41 probationers placed at Losperfontein during the past 15 months have paid off an average of 92 percent of all advances made to them which consist of the cost price of animals, implements, fertilizers, seeds, and monthly advances at the rate of about 4 shillings (97 cents) per day.

This satisfactory state of affairs is due mainly to the system of continuous control and supervision. Probationary settlers are not left to their own devices, but from the time of their arrival are assisted with advice from competent officers of the Department of Agriculture and Forestry, who not only advise but actually indicate what system of farming is to be followed.

By Dr. H. W. Turpin, assistant chief, Division of Agricultural Education and Extension. Pretoria. Farming in South Africa, vol. XL, no. 119, February 1936.

A U S T R A L I A

Report of Work in South Australia

Economic conditions were such that no change in the type of work being undertaken by the agricultural instructors was possible, and so their principal activities consisted of farm-to-farm visits, lectures to farmers' organizations, giving demonstrations, talking to classes of primary and high-school scholars, judging competitions, helping project clubs, and assisting with tree planting.

The work of the agricultural instructor in the lower North District has increased considerably both as regards lectures and individual farm visits, and a great increase has been noted in the use of the telephone as a means of the dispersal of agricultural knowledge. Farm visits were made to 344 farms, besides which a number of field days were attended, where many matters of agricultural importance were discussed. Most of the agricultural shows in the district were attended. Three conferences of the agricultural bureau were attended during the year in addition to the annual congress. The main activity, apart from the visits to farms, was in lecturing to branches of the agricultural bureau. In all, 72 meetings of this nature were attended, and lectures were given to five project clubs attached to the primary schools.

Report of the Minister of Agriculture for the year ended
June 30, 1935. Adelaide, South Australia.

Departmental Instruction and Advice in Victoria

When the Commonwealth grant was made available early in 1934, it was considered by the Department that the first essential in building up a fund of information on which field instructors could base their advice to growers was the extension of the existing field experimental work to deal with the most important problems of all districts. In adopting this policy the major portion of the time of the two experienced officers of the Department was occupied during the first year in the establishment and maintenance of these experiments, and the amount of district advisory work was correspondingly reduced. The position appears to be that this experimental work is now firmly established, and can in future be satisfactorily maintained by one senior officer with the assistance of field officers, thus permitting the expert to devote practically the whole of his time to field instruction and the direction of the extension staff.

An important step in connection with the extension work will be the stationing of an additional man at Myrtleford to work on the plots under the direction of the present officer in charge, who would then be available to assist in the instructional work among individual growers in the North-Eastern district.

The committee is of the opinion that this arrangement will adequately meet present requirements and, furthermore, considers that the direction of all instructional work should remain the function solely of the Department of Agriculture.

The Journal of the Department of Agriculture, Victoria,
Australia, vol. XXXIII, part 12, December 1935.

Work in New South Wales

The Agricultural Bureau has, during the past 12 months, made more than satisfactory progress. New branches have been formed, old branches have been rejuvenated, and much has been done by members both in their own localities and over wide areas to make the influence of the organization felt as a means by which knowledge may be spread and a better understanding built up, both of problems and of people.

At this time of the year many branches hold their annual meeting, and perusal of the reports submitted sheds interesting light on the variety of activities in which members of the organization--which is now established over most of the State--are engaged. From bush-fire brigades to flock competitions; from beekeeping to stock diseases; from cooperative buying and selling to field-wheat competitions; from instruction

Variety of Activities

on the compilation of income-tax returns to demonstrations on first aid; from lectures on pasture, stock, and crop improvement to the cultivation of dramatic art--these and a thousand other interests are to be found at bureau gatherings, and each plays a very definite part in the cultivation of a more scientific understanding of production and marketing methods and a greater interest in community affairs, as well as in the breaking down of barriers which stand in the way of the development of a good, healthy, neighborly spirit.

There has been a remarkable increase in the number of demonstrations conducted, both at conference and branch meetings during the past year, for it is generally conceded that one gains more when actually observing what is being described. Demonstrations of post mortems on stock have done much to increase the knowledge of bureau members in regard to stock diseases and the anatomy of the animals, and reports frequently

Value of Demonstrations

come to hand expressing appreciation of the educational value of this work that is being carried out by all the departmental veterinary officers.

Not the least of the activities of most branches of the bureau during the year was the conducting of experiment plots to ascertain the most suitable variety of and cultural practices for crops and pastures in the district, and the holding of a "field day" under the guidance of the departmental instructor to observe the results and study the lessons to be learned. These outings usually take the form of a picnic, and thus have a social as well as an educational value.

Bureau members have utilized to the full the service of officers of the Department of Agriculture, but have also made contact with other Government services by arranging for lectures by, and personal interviews with, officers of the Lands, Mines, Railways, Chief Secretary's, and Postal Departments, while they have also got to know the officers of the rural bank and the broadcasting commission as the result of frequent attendance at conferences.

Mutual help is a plank in the bureau policy, and local talent has been used to a considerable extent. Talks, demonstrations, lecturettes, impromptu and prepared speeches and debates by members all have tended toward the development of the individual contributing to the program and increasing the

knowledge of those who have attended the gatherings.

Many branches have taken part in cooperative buying and selling schemes with considerable saving to the individual, and recently the Advisory Council approved the idea of forming the Agricultural

Cooperative Buying

Bureau Cooperative Society, Ltd., as an adjunct to the council.

The Department of Agriculture in cooperation with the Commercial Apiarists' Association recently arranged a field day at Tamworth, in Mr. Norton's apiary. About 30 members of the association attended, and followed with interest the various demonstrations in apiary work and discussions concerning the industry.

Demonstrations were given of the preparation of material, use of electrical appliance in embedding comb-foundation, selection of a breeding queen, finding and caging of a queen, manipulation of the hive and frames, extracting, processing, and liquefying honey, using steam for heating a hot-water system as employed by Mr. Norton, and the use of a combined press-in and cage-introducing method. About a half hour was devoted to questions, and an address was given on Nosema disease.

A field day was also held at Wauchope in Mr. Rogers's apiary. About 60 attended, and visitors expressed their appreciation of the interesting and helpful demonstrations provided.

Field Days in Beekeeping

The program was along somewhat similar lines to the Tamworth one. Beekeepers assisted in all the demonstration work.

The aim of these field days is to improve beekeeping by demonstration in an up-to-date apiary, and to give beekeepers an opportunity in various central districts to discuss problems of local interest among themselves and with an officer of the Department. The success of the initial efforts is very gratifying.

The Agricultural Gazette, of New South Wales, vol. XLVII, part 1, January 1936.

B R I T I S H G U I A N A

Pure-Line Padi Extension Work

The extension work of the Department of Agriculture is very largely concerned with the education of farmers and the demonstration of the advantages in yield and quality to be obtained from using selected seed. With the appointment of agricultural superintendents in each county in 1930, organized distribution of pure and selected padi and the establishment of private seed farms were initiated. All the ricelands in the Colony were listed under separate heads, - including those located on sugar estates, private estates, under village authorities and peasant cultivations - and action for the establishment of pure-seed farms and the distribution of selected seed was taken accordingly.

The progress made in each district has been recorded each season, and from 1930 to 1935, 1,207,062 pounds of pure seed had been distributed, and 181 pure-seed farms established.

In addition, large proprietors of rice estates have encouraged their tenants to plant the whole of their estates with pure or selected seeds. This has met with success, and a silver cup kindly offered by the Royal Bank of Canada in 1934 for the largest area under cultivation by any one estate was won by the Hope Estate, which had successfully established over 900 acres under pure-line padi for the 1934 autumn season.

One of the greatest difficulties encountered by the peasant farmer has been the storage of the pure seed harvested until the following sowing season, but this is being overcome by some of the more progressive farmers (especially in the Berbice district) by building small rooms under their houses for this purpose. Some of the millers have also given great assistance in this matter.

In regard to pure-line seed distribution, the policy adopted generally is to provide a farmer with sufficient seed to plant a nursery of a given size, according to the size of his holding. This method enables him to obtain sufficient seed to plant the whole of his lands the following season. It would be impossible for the Department to supply such a large amount. Major seed farms, from which adjoining farmers can obtain seed, are now being established in some districts.

Further extension work is being carried out by the Department during 1936. In each district there are a number of seed-supply and demonstration plots laid down with the varieties at present most suited to the area. In addition to this, trials are being conducted in each district with a number of promising new varieties.

The Agricultural Journal of British Guiana, Georgetown,
British Guiana, vol. VII, no. 2, June 1936.

C A N A D A

Division of Extension and Publicity

The staging of educational exhibits at exhibitions and agricultural fairs in Canada is one of the major lines of work conducted by the Division of Extension and Publicity. These exhibits constitute a very useful medium through which the results of the experimental and research work of this branch are brought to the attention of thousands of Canadian farmers.

During the year exhibits were sent from the Central Experimental Farm to 23 agricultural fairs and shows. Special exhibits were prepared for the Canadian National Exhibition, and the Royal Winter Fair, Toronto; the Central Canada Exhibition, Ottawa; and the Quebec Provincial Exhibition, Quebec City.

From the branch farms, set-up and livestock exhibits were sent to 46 fairs and shows, and truck exhibits were sent to 31 illustration station field days. Members of the staff assisted in judging at 124 fairs and shows and addressed 73 meetings. Ninety field days were held on the branch experimental farms and stations.

During the year, 137 sets of lantern slides were sent to farmers' societies, horticultural societies, educational institutions, and young people's societies. An explanatory manuscript or lecture accompanies each set of slides.

Over 200 short press articles were sent out during the year to upward of 1,000 daily and weekly newspapers and agricultural journals in Canada.

The Weekly News Letter, containing short items giving news about the work going on at the farms and timely hints on all phases of farm work, was issued throughout the year.

This division and the Publications Branch were amalgamated early in 1935 under the name of Publicity and Extension Branch.

Junior Club Work

The influence of club work in encouraging the adoption of better methods of herd management, in improving the quality of livestock, and in stimulating a fondness for farm animals on the part of club members and of their parents as well, can scarcely be overestimated.

Under joint calf-club policies effective in Alberta, Ontario, Quebec, New Brunswick, Nova Scotia, and Prince Edward Island, a total of 6,232 members were interested in cattle-improvement work.

Boys' and girls' sheep clubs continue to be an effective means of interesting farm boys and girls in the raising of sheep. In 1934, 23 clubs supported jointly by the Dominion and Provincial departments of agriculture were in operation. The success which has attended the efforts of sheep-club members is illustrated by the fact that some of them had exhibits at the Central Canada Exhibition, the Royal Winter Fair, and the Guelph Winter Fair. During the year, many members obtained excellent returns from the sale of ram lambs graded XXX and XX under the ram-grading policy.

Joint swine-club policies, effective in all Provinces except Prince Edward Island, are proving valuable agencies in training young farmers in feeding, breeding, and market requirements. The membership in 148 clubs organized during the year totaled 2,832.

Report of the Minister of Agriculture for the Dominion of Canada for the year ended March 31, 1935. Ottawa.

Work in Ontario

The work of the extension department may be classified under 12 headings, as follows:

- Educational exhibits.
- Farm and Home Week.
- Visiting groups.
- Packet-loan library.
- Publications.
- Press news service.
- Advertising.
- Photography.
- Charts and lantern slides.
- Starling control.
- Public addresses.
- Miscellaneous.

Farm and Home Week.

The program covered only 3 days, but there was nearly as large a total attendance in the 3 days as in 5 days the previous year. Approximately 10,000

people visited the college during these 3 days.

A few slight changes were made in the general arrangement. No attempt was made to divide the men into groups for different inspection tours. Instead, lunch was served rather early so that all were through by 1 o'clock, when there was a grand livestock parade from 1 to 1:30, after which all visitors were invited to go with a competent guide to the field experiment plots from 1:30 to 2:30 p. m. Very large numbers took advantage of this opportunity on each of the 3 days. The time from 2:30 to 4 was used in inspecting the special exhibits set up in the various departments and in having a general look around the premises.

During the same afternoon hours there was a special program of exhibits and demonstrations for ladies.

A special feature of this year's Farm and Home Week was the provision of a day nursery for very young children. A doctor and a nurse were in charge of this, and they were assisted by members of the Macdonald Institute staff

Day Nursery

when necessary. Mothers having young children with them were invited to leave their children at the day nursery from 11 a. m. to 4 p. m., and a surprisingly large number of mothers accepted this

invitation. The day nursery proved very popular and was a real success. A special lunch suitable to the children's needs was served each day, and provisions made for a rest hour after lunch. Both mothers and children were well pleased with this arrangement, and no doubt it will be continued next year, with enlarged accommodations.

Publications.

In the special series of Extension Circulars two new circulars and a reprint were issued during the year.

In addition to these circulars, a handsome illustrated booklet showing many of the buildings and beauty spots of the campus and something of college activities was prepared, and 10,000 copies were issued by the Extension Department; also 12,000 copies of the complete program for Farm and Home Week and 4,000 copies of the annual greeting card to O. A. C. alumni.

Photography.

Owing to the excellence of our photographic equipment and the skill of our photographer, the Extension Department is now called upon to do practically all of the photographic work for all other departments of the college. This work is varied in character, including the photographing of all kinds of livestock, poultry, bees, crops, trees, plants, buildings, laboratory equipment, class activities, technical operations, etc., besides some microphotography. During the year 1,015 negatives and 3,477 photographic prints were made. Quite a number of the latter are enlargements.

At the suggestion of the fire marshal a steel filing cabinet for photographic film negatives was purchased. This has a capacity of about 8,000 films.

Charts and lantern slides.

As with photography, other college departments are now depending largely on the Extension Department for the making of charts and lantern slides for use in classroom and extension work. During the year 267 slides were made,

of which quite a number were colored; a large number of charts, signs, and labels were made for various departments and for our own educational exhibits.

In October a lantern-slide projector was bought and this is proving very valuable for use in extension lectures.

Starling control.

So many complaints were received at the Department of Agriculture in Toronto regarding damage being done by starlings, especially in the Niagara peninsula, that it was deemed necessary to see whether anything could be done toward controlling this so-called pest. The Extension Department at the college was asked to look into this matter, to determine as far as possible to what extent the starlings were proving a pest, and to devise means of possible control.

During the winter, spring, and summer months the director of extension gave much of his time to the starling project. A questionnaire was prepared, and 3,000 copies were distributed. Organizations were set up in the counties in and near the Niagara peninsula, and a large proportion of the population was active and keen in the destruction of eggs and young throughout the breeding season. Many traps were constructed for use. In one case, more than 2,000 starlings were captured in a single trap during the summer.

It is everywhere proclaimed that much less damage was done to fruit and vegetables than in the previous year. We are therefore encouraged to think that the efforts put forth and the concerted action taken in the fruit-growing regions has had very profitable results, and we feel that the work should be continued and perhaps enlarged upon.

Public addresses.

The director of extension gave 45 addresses before various public gatherings. These included short-course groups, junior-farmers' organizations, women's institutes, service clubs, teachers' conventions, high-school groups, etc.

Sixtieth Annual Report of the Ontario Agricultural College and Experimental Farm, Ontario Department of Agriculture. Toronto, 1935.

Public extension service.

This service has been promoted to furnish specialized clinical and laboratory assistance in the diagnosis, prevention, and operative treatment of diseases in all classes of animals. It has been developed along such lines of usefulness as seemed to be most effective and desirable to those requiring specialized services, and to furnish clinical and laboratory material for teaching and demonstrational purposes in class work. It thus serves a twofold purpose, and has also been made more or less self-sustaining by making a nominal charge to cover any expense incurred where the service rendered is of an individual commercial nature.

The increasing demand for these extension services creates a large amount of detailed routine work of a skillful nature, with an immense volume of correspondence, personal interviews for advice, and the preparation of test charts and laboratory reports concerning the work. Throughout the year the entire staff has been kept busily engaged, and each individual has performed his work in an efficient and diligent manner.

Report of the Minister of Agriculture, Ontario Department of Agriculture, for the year ending October 1934. Toronto.

Work in Quebec

Provincial Training School.

Our school, like the farm and herd, produced good results by again spreading this year sound farming principles throughout the district. For this purpose short courses of a week were organized to impart theoretical and practical notions on agriculture to young farmers. About 150 farmers or sons of farmers availed themselves of this opportunity by coming in groups of 20 or 25 to attend lectures on agriculture while farm operations were at a standstill. Courses were given on farm improvement through drainage, rotation, the judicious use of fertilizers and amendments, good seed, attention to various crops, and the setting up of suitable pastures. Instructors recommended herd improvement by means of cow testing, the selection of breeding animals, better feeding of animals, checking contagious diseases, forming a good herd of swine, and horse breeding. A special branch was also recommended on each farm, such as beekeeping and horticulture, according to the locality.

Short Courses

To illustrate each of these courses, demonstrations were given in every department of "the farm." The young farmers attend lectures and demonstrations with unflagging interest; in the evening informative and recreational movies complete previous instructions. All the farmers gladly come to the summer courses to visit "the farm" with its rising crops and grazing cattle--the more educational day, since further explanations are given on the departments visited and the crops inspected.

Poultry clubs.

Last March, poultry clubs aggregated 1,796 members--1,472 regular and 324 affiliated.

Club members have to keep accounts of their poultry yards and send a monthly copy of their report to the poultry section. These accounts compiled by us for the last 4 years are a satisfactory proof of the advantages accruing to farmers from poultry keeping. Coming from all parts of the Province, such reports reveal the possibilities of poultry husbandry.

The average profit realized by club members, during the last poultry year--from April 1, 1934, to March 30, 1935--amounted to \$1.29 per hen, with an average of \$144.96 per poultry yard. The average number of hens wintered per poultry yard was 113; the average of hens raised was 332.

Profits of late years by poultry-club members were as follows:

<u>Period</u>	<u>Profit per hen</u>
1933-34-----	\$1.24
1932-33-----	1.43
1931-32-----	1.60

Report of the Minister of Agriculture for the Province of Quebec for the year ending June 30, 1935.

CEYLON

Young Farmers' Club Movement

Young Farmers' Clubs have come to Ceylon to stay. The Hon. Mr. D. S. Senanayake, Minister of Agriculture, inaugurated the movement recently by opening a branch at the Kalutara Scout Colony.

The movement is modeled upon the young farmers' club movement which originated in England over 20 years ago and which has since spread to many countries.

The objects of the movement will be modified in Ceylon to suit local conditions, but the underlying purpose will be the same. This is to give to all country children a general farm education to prepare them for the work on the land, to improve the stock in the district, to teach bookkeeping and the value of records of receipts and expenditures, teamwork, and the value of cooperation.

Objectives

Special importance will be given to pasture development, cultivation of the soil, conservation of fodder, feeding of stock, care and judging of all farm animals, carpentry, horticulture, and the growing of vegetables.

The Young Farmer, London. A quarterly journal, vol. VII, no. 4, December 1935.

CYPRUS

Demonstrational Silkworm Rearing in Girls' Schools During 1936

Arrangements have been made in consultation with the director of education for demonstrational silkworm rearing to be carried out this season in 152 girls' schools, and one dram of silkworm eggs has been given by the Agricultural Department to each of these schools.

The rearing will be carried out by the schoolgirls of the three upper classes under the supervision of the schoolmistress.

Sericultural officers and agricultural officers will visit the schools to give all necessary instructions in connection with the rearing.

In schools where there is more than one mistress, the rearing will be under the special charge of one of the mistresses.

A prize of 1 pound (about \$4.86) will be awarded in each district to the schoolmistress who has carried out the best demonstration, and all other schoolmistresses who carry out a satisfactory demonstration will receive a prize of 10 shillings (about \$2.40).

The Cyprus Agricultural Journal, Nicosia, Cyprus, vol XXXI, part 1, March 1936.

EGYPT

The agriculture of Egypt is controlled and directed by the Ministry of Agriculture. This administrative division comprises many sections: the General Secretariat; the Division of Agronomy and Propagation, and that of

Translations and Publications; the Station for the Protection of Plants; the Divisions of Entomology, Mycology, Veterinary Service; the Office of Cooperatives; the Divisions of Horticulture, Botany, Improvement in Plant-Breeding, Chemistry, etc. The Committee on Cotton Investigations and the Museum of Agrology also form a part of the division.

Collaborating with the Ministry is a "consultative or advisory body on agriculture" composed of the Minister, six ex-officio members, eight representatives of institutions, and seven members chosen from among the most important farmers.

The Ministry has 13 agricultural inspectors in the Provinces, each one assisted by one or more deputy inspectors. Also there are agronomy engineers and agricultural overseers in the different districts. The engineer in charge controls the work of all these.

The inspectors are the mediators between the Ministry and the farmers. They are the technical directors. They present monthly information on the progress of the various crops and on the condition of the herds. They control

the application of the laws and regulations relative to the control of pests and particularly of the rose midge and the leaf caterpillar of cotton; the fumigation of the orange trees, and the pul-

Agricultural Inspectors

verization of fruits and of other plants. They carry out the programs of experimentation of the Ministry in the Provinces, and superintend the farms on which cotton for seed is cultivated (cotton seed-farms). They inspect the orchards and advise the proprietors as to everything they need, encouraging orchard enlargement and the planting of trees. They distribute pure seed for the planting of cotton. They hold meetings with the farmers to explain to them the important agricultural questions and to give them advice on the formation of cooperative societies. They assist the technicians in irrigation in the investigations relative to this matter. They carry on agricultural investigations, and are helpful in obtaining the information which the various technical divisions of the Ministry need.

La Vida Agricola, Revista de Agricultura y Ganaderia, Lima, Peru, vol. XIII, no. 148, March 1936.

ENGLAND

Agricultural Education out of School

Agricultural education out of school, provided by the Ministry of Agriculture and Fisheries, includes technical advice for farmers. The plan followed by the Ministry of Agriculture is the division of England and Wales into 13 provinces, each served by an advisory center, which may be either a university or university college with a department of agriculture, or an agricultural college.

The local general practitioner is the county agricultural organizer, who is an officer appointed by the county council to give advice to farmers in technical problems. The county agricultural organizer generally has under his direction a staff which may include a horticulturist, a poultry instructor, a dairy instructor, etc; if the county council possesses a farm institute, the county agricultural organizer is usually also responsible for the institute.

A specialist advisory officer is stationed in each Province at the advisory center; there are entomologists for plant pests; chemists specialized in soils, manures, etc.; advisers in veterinary medicine; bacteriologists, etc.

International Institute of Agriculture, Agricultural Education in the World, vol. 1: Europe; first part - Rome. December 15, 1935.

Extension Lectures on Agricultural Subjects

The program of lecturers and the subjects they are prepared to speak about under the Ministry's extension lecture scheme in the forthcoming winter session, has now been issued. The scheme was inaugurated in 1923, and since then the number of lectures delivered has steadily increased year by year until last year nearly 25 lectures were delivered. This large number alone shows that the advantages of the scheme have been widely appreciated. There is, however, scope for a further considerable increase in the number of lectures given, since the lectures offered in the program exceed three times that number.

The objects of the scheme are to make available to the practical farmer and horticulturist expert advice and information on a wide range of subjects, during the long winter evenings when the farmer has perhaps more leisure and the inclination to listen to the experts who may deal with his everyday problems.

It is hardly possible to give any concrete idea of the variety of subjects or the names of the lecturers available under the scheme, but it may perhaps be said that the most familiar and famous names in all branches of agricultural science are included in the program. In a number of instances it is possible to illustrate the lectures by lantern slides where electric current is available.

Lectures have been delivered to local agricultural societies and clubs all over the country, in addition to many branches of the National Farmers' Union.

To obtain the services of lecturers for groups of farmers, agricultural societies, or clubs, application should be made to the agricultural organizer for the county concerned for information as to whether a lecturer on the particular subject desired is available, and the organizer will endeavor to make arrangements for the lecture to be given.

The Journal of the Ministry of Agriculture, vol. XLIII, no. 5, August 1936.

Young Farmers' Clubs in Yorkshire

Young Farmers' Clubs have developed comparatively recently in Yorkshire, where there are now more than 30. A year ago the Yorkshire clubs were formed

into a county federation which, on account of the great size of Yorkshire, is divided into regions corresponding to the areas allotted to the district lecturers. The Department has defined its policy in the matter of Young

County Federation Formed

Farmers' Clubs--it is considered to be a part of the business of members of the staff to assist in the initiation of clubs at suitable centers and in their development, provided that there is sufficient local voluntary leadership to enable the clubs not to be wholly dependent on members of the staff. The newly formed federation has an organic connection with the Department by the provision, in the constitution, that the secretary of the Department shall be the secretary of the federation, and that various members of the staff shall be ex-officio members of the executive committee. In addition to this, the district lecturers act as secretaries of the regions.

The Journal of the Royal Agricultural Society of England,
vol. 26. London.

G E R M A N Y

Women in Poultry Farming

For years we have been trying to interest the small farmer in appropriate poultry farming. Since this branch of the farm lies in the hands of the peasant woman, greatest importance has been placed on the instruction of poultry farming in all peasant schools. Besides, many young girls also make poultry farming their vocation because they either take care of the herd-book farming on the larger farms, or they have prospects of being employed in "farm guidance."

First of all, they work as apprentices on an educational farm particularly suited to that purpose, which is under constant observation of the Landesbauernschaften (Regional Peasant Corporation). Thereby the young people are guaranteed actually to learn to find their way about in all fields, for instance, artificial and natural hatching, breeding and feeding, and problems of breeding and diseases. The director of the farm is expected to instruct them in the theories. The Government institutions and members of the board of examiners, from time to time, publish a list of questions in the professional journals, which all apprentices must answer on paper. The commissioners of the Landesbauernschaft correct the answers sent in by the apprentices. The time of apprenticeship lasts 2 years; in order to avoid one-sidedness, the apprentice should spend her time on two different farms. The work on farms of parents is acknowledged only in exceptional cases. Before entering apprenticeship, the apprentice must have passed her sixteenth year. The examination passed, the apprentice has the right to call herself a "farmhand."

Apprenticeship

Not all the young girls continue. Many are satisfied with what they have achieved up to the close of the examination. Years of practical work on larger poultry farms begin. In spite of the fact that many of the genuine

poultry farms have succumbed to the great economic difficulties of the past years, the herd-book farming of today, and the exact bookkeeping and listing demanded thereof, have created a very great number of places for employment. The demand for chicks from herd-book farms or acknowledged breeding farms was so great last spring that everybody could not be satisfied. The keeper of poultry on ordinary farms is gradually beginning to resort more and more to efficient young livestock, and to dispose of home-breeding and hatching.

After 5 years of practice, the efficient "farmhand" is given the possibility of passing her master poultry examination at an acknowledged Government institution. This examination will gain particular significance

Further Advancement
for the "Farmhand"

in the future; namely, as soon as the condition which has been worked on for so long, has been carried through. This condition provides that the directors of poultry farms must all have passed their master examinations. Along side this is

the road leading to the profession of breeding directress. This course also requires 5 full years of practical work after having successfully completed the "farmhand" examination, and, in addition, 1 year of work and study at a Government institution. As qualified breeding directress, a woman can demand a higher and more independent position as reporter on poultry breeding for the Landesbauernschaften (District Peasant Corporations), or as manager of single, specialized district groups for herd-book farming and keeping poultry on farms. Likewise, the large breeding farms with their controlled flock of breeding hens will seek these competent and experienced hands.

Domestic and Foreign Trade--and Daily Press. Berlin, Germany.

I N D I A

The South Indian Agricultural Bureau

An unofficial organization named The South Indian Agricultural Bureau has recently been formed in South India with headquarters at Coimbatore. This organization consists of agricultural officers who have retired from Government or State service. The object of the organization is to promote the interests of agriculture and the general welfare of the rural population. No member of this association is entitled to any salary or emoluments, nor will the organization be worked on a profiteering or speculative basis.

Some of the things that the Bureau has decided to devote attention to are: Selections of suitable lands and establishment of farming colonies, publication of journals and books in simple language, survey and valuation

Some Objectives

of lands and estates for purchase or sale, giving expert advice on lands, crops and their improvement, arranging for training of young men for agricultural careers, supply of trained men for per-

forming the duties of managers of estates, land surveyors, agricultural teachers and advisers in agricultural matters. Arrangements for supply of seeds, manures, machinery, cows and bulls, and sundry other needs of the villager, and disposal of produce are also included.

We wish the Bureau all success in carrying out the very ambitious program it has put before it, and hope that it will have a useful career and will serve the great needs of the farmers of South India.

The Allahabad Farmer, Allahabad, U. P., India, vol. X, no. 1, January 1936.

I R E L A N D

The system of agricultural education in operation in northern Ireland is directly controlled by the Ministry of Agriculture, but the schemes of itinerant instruction in agriculture, poultry keeping, butter making, and horticulture, which constitute the basis of the system, are administered by the county committees of agriculture under the direction of the Ministry. A sum is raised locally for the purpose of the schemes and, in addition, the Ministry makes a grant toward the expenditure incurred in the working of the schemes.

Twelve agricultural organizers and instructors, ten instructors in poultry keeping and butter making, nine horticultural instructors, and sixteen agricultural overseers working in the mountainous areas, are employed in northern Ireland by county committees of agriculture. Close personal touch is maintained between the Ministry's research and inspectoral staffs and these officers of county committees of agriculture, whose duties include the giving of practical and scientific information to the farming community through the media of lectures, visits, experimental and demonstration work, and instruction classes. These short courses of instruction for farmers' sons and daughters over 18 years of age, which are held at selected local centers, are intended to meet the requirements of young men and women who are unable to leave their homes for extended courses of training.

International Institute of Agriculture, Agricultural Education in the World, Rome, vol. 1: Europe, first part. December 15, 1935.

M A L A Y S T A T E S

Agricultural Instruction

Final judging in the padi sawah competition for the Seremban district of Negri Sembilan was completed. The results were not as good as was previously anticipated, owing to the fact that very little, if any, attention was given to most padi fields during the recent fasting month. Despite this somewhat disappointing result, some entrants maintained their keenness throughout the competition, especially in the mukims of Rasah and Labu.

A demonstration similar to that described before was given to headmen from the Salinsing, Briah, and Gunong Semanggol mukims of Krian at the Government rice mill, Bagan Serai, on December 16.

Demonstrations On December 15, the State agricultural officer, Johore, assisted by members of his staff, gave a second demonstration to headmen and padi growers at the Jemintah padi test plot. Some 70 people attended, and support was lent to

the demonstration by the presence of the State commissioner and the collector and assistant collector of land revenue, Sagamat. The later-maturing strains of padi were examined, and the use of the sickle for reaping, the barrel for threshing, and the winnowing machine were demonstrated.

The Malayan Agricultural Journal, Kuala Lumpur, vol. XXIV, no. 1, January 1936.

Rural Lecture Caravan

Twenty-nine centers in all parts of the State were visited during the year. The caravan remained 2 nights at each center instead of 1 night, as was the former practice.

An increased number of selected exhibits was provided for demonstration, and several series of lantern slides were available in addition to the films.

The longer stay at each center is a decided improvement, and the greater range of exhibits provided, either as models as in the case of approved types of poultry houses, or as actual products, as in samples of faulty and well prepared copra, has been much appreciated. This is indicated by the increased interest shown in the tours at the time and in the efforts subsequently made to follow advice given in lectures and demonstrations.

Outstanding examples are, the greater keenness evinced by the small-holders of Baëan Datoh in improving the quality of their crops, and the successful efforts made by certain poultry keepers in Batu Gajah to copy the type of poultry house recommended for use by small-holders.

Small-Holders' Advisory Service

On July 1 an Asiatic rubber instructor was appointed to Negri Sembilan and Malacca by the Rubber Research Institute, and has been working in this State under the direction of the State agricultural officer for the remainder of the year, at first in the Labu district and subsequently in Rembau. His program has included demonstrations to small-holders in connection with the manufacture of rubber sheet, advisory work with regard to tapping and disease control, and the collection of general information concerning the conditions of the rubber industry among small-holders.

Rat Campaign

As in the previous year, poisoning and trapping were the main methods employed for the control of rats. Approximately 2,000,000 poison balls were made by the staff of the rat-destruction officer and distributed free to padi cultivators. Furthermore, cultivators were advised and encouraged to make rat traps of the type known as "sand traps", which are inexpensive and at the same time very effective. The distribution of steel traps by the Department was found to be no longer necessary. Throughout the year lectures were given at the mosques for purposes of instruction and organization. Immediately after the harvest and during the breeding season rats were dug out of their holes in the bunds; 191 hunts were held, and approximately 21,000 rats were killed. At the end of the year no damage of a serious nature had been done by rats in any part of Province Wellesley or Penang.

Department of Agriculture, Straits Settlements and Federated Malay States, Kuala Lumpur, Reports of the Field Branch for the year 1934.

Kuala Selangor Agricultural Show

The Kuala Selangor agricultural show was held on September 28, 1935, in Kuala Selangor Town. The show was attended by the acting adviser on agriculture and by various officers of the agricultural, veterinary, cooperative, education, and health departments. The competitive sections were open to exhibitors from the subdistrict of Sabak Bernam who had their own show on July 14. Padi was not included in the schedule, since district padi competitions had already been held independently in Kuala Selangor and in Sabak Bernam earlier in the year.

Special sections were allocated to poultry and to goats. As usual in this district, the classes which achieved the highest standard were those of copra, coconut oil and other coconut products, though much of the copra was imperfectly dried. Soap was not of a very high quality. A number of entries of coconut sugar, cane sugar, and locally produced honey were of excellent quality. The standard of the poultry was not high, the birds being for the most part inferior to those shown in Ulu Selangor and Ulu Langat. The fruit section necessarily suffered somewhat from the fact that many varieties are not in season at this time of the year.

The courthouse was allocated exclusively to noncompetitive exhibits by the Departments of Agriculture and Health. The exhibits of the Department of Agriculture were as follows:

- (a) Padi. A winnowing machine.
A Krian padi mill.
- (b) Copra. Model kilns of good and bad type; specimens of good and defective copra.
- (c) Coconut oil. Various implements used in the manufacture of coconut oil other than those employed normally in Kuala Selangor, i.e., a treadle machine for grating the meat; oil presses from Pahang and Kelantan.
- (d) Poultry. Models of houses suitable for poultry under kampong conditions.

All the implements mentioned were shown in action and appeared to be a source of genuine interest to all the onlookers.

The Health Department showed numerous exhibits dealing with rural hygiene and the control of malaria.

It may be noted that this is the last agricultural show of 1935, being the sixth in a series of agricultural and padi shows held throughout the State of Selangor during the year.

The Malayan Agricultural Journal, vol. XXIII, no. 11, November 1935. Kuala Lumpur.

S C O T L A N D

Agricultural Education out of School

This education work carried on by the colleges hinges mainly on a resident organizer, who is appointed for each county within the area of the colleges. It should be recorded here that Scotland has been divided into

three Provinces, each under the direction of an agricultural college. The county organizer's duties are as follows:

To provide agricultural instruction by systematic or short courses of lectures.

To give practical advice and assistance to farmers.

To conduct experimental and demonstration work on selected plots of land.

The organizer has associated with him one or more instructors in practical work, such as cheese making and butter making, horticulture, poultry keeping, and beekeeping. It is in the north of Scotland that the county extension work is most highly developed.

The general educational work of the county organizer is done mostly in winter evenings, and takes various forms: Short courses of from 1 to 6 lectures, or more systematic courses, extending to from 15 to 20 lectures, at selected centers which vary from year to year.

International Institute of Agriculture, Agricultural Education in the World, Rome, vol. 1: Europe, first part. December 15, 1935.

County Work in the North, 1934-35.

During the year 2,405 class and lecture meetings were held at various centers in the college area with a total attendance of 51,102, and 13,288 visits were recorded by the staff for organizing and advisory purposes. There were also 1,750 attendances recorded at educational demonstrations and exhibitions organized by the college at county agricultural shows. Demonstration experiments on problems connected with farm crops and the rearing and feeding of livestock were carried out at 318 farms and small holdings in the area.

Systematic courses of instruction in agriculture, poultry keeping, dairying, and beekeeping were organized at 51 local centers in the area. There was a total enrollment of 986 at these classes, with an aggregate attendance of 18,989.

An encouraging feature of this branch of work in several of the county districts is the increasing number of rural school teachers who are showing a desire for closer cooperation with members of the college extension staff

Continuation Classes

in organizing joint continuation classes in rural and agricultural science on the lines of the scheme given in the college calendar. The success which has been achieved in these counties is due in

large measure to the initiative of the county organizers, and the personal appeal which they have made to directors of education and rural school teachers in the interests of agricultural education. The formation of a successful continuation class in agriculture and poultry keeping at Barvas, Lewis, is a good example of what can be done in this way, as it is almost impossible by the ordinary methods of advertising to establish continuation classes in agricultural subjects in the Western Islands.

Numerous subjects relating to agriculture, poultry keeping, dairying, horticulture, beekeeping, farm economics, etc., were dealt with by the staff

Short Course Lectures

in single and short-course lectures in the various counties of the area. During the year 1,038 lectures and demonstra-

tions were given at 447 centers in the area, with a total attendance of 26,680.

Although these short courses are not of the same educational value as systematic classes, they are an essential part of a scheme of college extension work. They are a means of providing reliable information to farmers and persons engaged in rural industries generally on the latest developments in agriculture and its kindred branches. They give the staff an opportunity of keeping the agricultural community informed of the work that is going on at the various agricultural research institutions, and of explaining the practical significance of the results of these researches.

There are now 29 Junior Agricultural Clubs in the northern area. Club membership is well maintained despite the dropping of older members when they reach the age limit of 25 years. The older people of the community take a keen interest in the local clubs and their work, and the young people are eager to join when they reach the age for membership. It is gratifying to find that members who have reached the age limit usually continue their club connection as associate members. Except that they cannot take part in club competitions or act as club office bearers, associate members have all the privileges of club membership. With their growing number it has been suggested that the county associations should now provide special competitions for associate members. If this were done and the age limit fixed at 30 years, it would undoubtedly add greatly to the interest and value of club work.

Junior Agricultural Clubs

With one exception "senior clubs" have been formed at the conclusion of a systematic class or course of lectures conducted by the county organizer. The members are mostly beyond the age for admission to a junior club, but young members are admitted when they are too few in number to form a junior club. There are eight senior clubs in the area. The county organizers assist the clubs in organizing suitable programs, including lectures, debates, and demonstrations on subjects of agricultural interest, visits to the experimental farm, research institutions, prominent stock farms, etc. In one or two instances the county organizer acts as honorary secretary to the clubs.

Senior Clubs

The North of Scotland College of Agriculture report on the work of the North of Scotland College for the year 1934-35. Aberdeen.

The Edinburgh and East of Scotland College of Agriculture

In connection with the educational program undertaken direct by the county agricultural organizers, the most important fact to note is the success of the continuation class. The response has been better in some counties than in others, but continuation classes have been established over practically the whole of the college area, and are now making provision for the instruction of young women as well as of young men. They are becoming a very helpful means of getting young people on the termination of the 2-year continuation course to form themselves into discussion societies, which provide the organizers with further opportunities for effective educational work.

The volume of advisory work carried out by the extension staff is steadily increasing. The organizers were in regular attendance at the weekly markets in the county, and special features of the work have been the taking of soil samples for lime requirement test and, in summer, advice regarding the health and the purity of potato stocks. All the school gardens in the county have been visited regularly during the year. The guidance given to headmasters is much appreciated, and the standard of efficiency is being well maintained. Practical demonstrations on fruit propagation and vegetable culture have been given to the pupils.

Continuation Classes in Fife County

It has now been 3 years since the beginning was made in Fife of replacing the popular lecture courses or single lectures by systematic instruction to young men in classes organized under the continuation-class code, and the response has been so encouraging that in this county there has now been a complete change-over from the older type of instruction to the new. The teaching program arranged at Kirkcaldy in the last year included the subjects of poultry keeping and practical dairying, thus making provision for the first time for the particular requirements of young women under the scheme.

Courses of Instruction in Roxburgh County

In the sphere of agriculture organized courses of instruction were conducted at nine centers in different parts of the county. The principal subjects dealt with were the rearing, feeding, and management of stock, and the application to local farming practice of the results of experiment and research. Special attention was given to questions connected with sheep husbandry, which is the dominant interest in the area. The courses were attended by farmers, farm stewards, shepherds, and agricultural workers, including many young persons engaged in agricultural pursuits. Arising out of the intention to inaugurate a continuation class in agricultural science at Denholm in the coming winter, stock demonstrations were arranged in order to draw attention to the project. There were large attendances of young men, and the demonstrations given on Cheviot sheep, Ayrshire cattle, and Clydesdales by well-known breeders were greatly appreciated.

Report on the work of the Edinburgh and East of Scotland College of Agriculture, 13 George Square, Edinburgh, for the year ending September 30, 1935.

Agricultural Discussion Society at Abbey St. Bathans

At a public meeting held in Abbey St. Bathans, Berwickshire, it was unanimously agreed to form an agricultural-discussion society for Abbey St. Bathans and district. There was a large attendance of farmers from the surrounding area.

The meeting was opened by the principal of the Edinburgh and East of Scotland College of Agriculture, who gave an address entitled "Recent Advances in the Management and Utilization of Grassland." He referred to the improvement which had generally taken place in rotation pastures throughout the

country largely due to the use of better seeds, mixtures, and to the application of suitable artificial fertilizers.

The meeting thereafter considered the question of forming an agricultural-discussion society. The speaker said that it was very desirable to have an opportunity for hearing and exchanging views on agricultural questions, and this could well be provided by means of a society.

The county agent said that the movement was spreading, and much useful work of an educational nature was being done.

Thereafter it was duly moved and seconded that a society be formed.

A president was appointed for the society, and a chairman was unanimously elected. A committee was appointed with powers to make all arrangements.

North British Agriculturist and Farming News, (Scotland's oldest farming journal), Edinburgh, Scotland, vol. LXXXVIII, no. 11, March 5, 1936.

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Foreign Agricultural Extension Activities

*Africa, Australia, British Guiana, Canada,
Ceylon, Cyprus, Egypt, England, Germany,
India, Ireland, Malay States, Scotland*

Extension Studies and Teaching Section
M. C. Wilson, In Charge



UNITED STATES DEPARTMENT OF AGRICULTURE
Extension Service
Division of Cooperative Extension
C. W. WARBURTON *Director*
C. B. SMITH *Chief*
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